	Application No.	Applicant(s)
Notice of Allowability		
	10/775,310	FIEDLER, ALAN Art Unit
	My-Trang N. Ton	2816
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>Tel. Int. 09/21/05.</u>		
2. The allowed claim(s) is/are <u>1-14</u> .	·	
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some* c) ☐ None of the:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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Attachment(s)  1. ☑ Notice of Perforances Cited (PTO_802)	5   Notice of Informat	Patent Application (PTO-152)
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	6. ⊠ Interview Summar	
	Paper No./Mail D	ate <u>9/21/05</u> .
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date</li> </ol>	8), 7. Examiner's Amend	dment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛭 Examiner's Staten	nent of Reasons for Allowance
•	9.  Other	millmandon
		MY-TRANG NUTON PRIMARY EXAMINER

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# **Drawings**

The informal drawings are acceptable for examination purposes only. The formal drawings are now required.

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Att. Klos on September 21, 2005.

The application has been amended as follows:

## In the specification

Page 3, under "Brief description of the drawings" section, last line, replace "Fig. 8 is" with – Figs. 8a-8b are –.

## In the claims

In claim 11, line 1, replace "2" with – 3 --.

#### Reasons for allowance

The following is an examiner's statement of reasons for allowance:

The present invention is drawn to a phase multiplier circuit utilizing a plurality of phase multiplier subcircuits, where in the plurality of phase multiplier subcircuits comprising first – sixth dual gate transistors, first – eleventh transistors, first – second inverters recited in claims 1-11; or means for generating substantially equal bias

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currents, means for generating a phase current, means for generating a voltage and means for controlling the phases recited in claim 12; or a bias current generator, a phase current generator, a voltage generator, and a phase controller recited in claim 14. None of the prior art disclosed or suggested to show the particular structure and/or the particular operation recited in these claims namely: "the first -fifth dual gate transistors" in combination with "the first -fifth transistors" and "the first - second inverters" as recited in claim 1; "the first - sixth dual-gate transistors" in combination with "the first - eighth transistors" and "the first - second inverters" as recited in claim 3; the "means for generating substantially equal bias currents... an the output signal with the largest phase" and "for each output signal ... means for generating a phase current ... and of a polarity opposite that of the bias currents" in combination with "for each output signal, means for generating a voltage .. onto a loop filter capacitance" and "means for controlling the phases which includes voltagecontrolled delay elements..." as recited in claim 12; "the bias current generator" and "the phase current generator" in combination with "the voltage generator ... a loop filter capacitance" and "the phase controller" as recited in claim 14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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